

WHAT IS CLAIMED IS:

1. A debug device for use in converting a parallel program to a serial program and executing debugging, comprising:

5 serialization means for converting the parallel program to the serial program and creating debug data that indicates a corresponding relation between the parallel program and the serial program; and

 storage means for storing the debug data.

10 2. The debug device as claimed in claim 1, wherein the debug data indicates a line number correspondence between the parallel program and the serial program.

3. The debug device as claimed in claim 1, wherein
15 the debug data indicates a variable identifier correspondence between the parallel program and the serial program.

4. The debug device as claimed in claim 1, wherein
 the debug data indicates a line number
20 correspondence and a variable identifier correspondence between the parallel program and the serial program.

5. A debug device for use in converting a parallel program to a serial program and executing debugging, comprising:

25 storage means for storing debug data that

indicates a corresponding relation between the parallel program and the serial program; and

conversion means for mutually converting corresponding data between the parallel program and the serial program based on the debug data.

6. The debug device as claimed in claim 5, wherein the debug data indicates a line number correspondence between the parallel program and the serial program.

10 7. The debug device as claimed in claim 5, wherein the debug data indicates a variable identifier correspondence between the parallel program and the serial program.

8. The debug device as claimed in claim 5, wherein
15 the debug data indicates a line number correspondence and a variable identifier correspondence between the parallel program and the serial program.

9. A debug device for use in converting a parallel program to a serial program and executing debugging,
20 comprising:

serialization means for converting the parallel program to the serial program and creating debug data that indicates a corresponding relation between the parallel program and the serial program;

25 storage means for storing the debug data; and

conversion means for mutually converting corresponding data between the parallel program and the serial program based on the debug data.

10. The debug device as claimed in claim 9, wherein

5 the debug data indicates a line number correspondence between the parallel program and the serial program.

11. The debug device as claimed in claim 9, wherein

10 the debug data indicates a variable identifier correspondence between the parallel program and the serial program.

12. The debug device as claimed in claim 9, wherein

15 the debug data indicates a line number correspondence and a variable identifier correspondence between the parallel program and the serial program.

13. A debug method for converting a parallel program to a serial program and executing debugging, comprising:

converting the parallel program to the serial program by serialization means;

20 creating debug data indicating a corresponding relation between the parallel program and the serial program; and

storing the debug data in storage means.

14. A debug method for converting a parallel program

25 to a serial program and executing debugging, comprising:

storing debug data indicating a corresponding relation between the parallel program and the serial program in storage means; and

5 converting data of the parallel program and the serial program that correspond to each other based on the debug data by conversion means.

15. A debug method for converting a parallel program to a serial program and executing debugging, comprising:

10 converting the parallel program to the serial program by serialization means;

creating debug data indicating a corresponding relation between the parallel program and the serial program;

storing the debug data in storage means; and

15 converting data of the parallel program and the serial program that correspond to each other based on the debug data by conversion means.

16. A computer-readable storage medium that stores a program for implementing the debug method as claimed in
20 claim 13.

17. A computer-readable storage medium that stores a program for implementing the debug method as claimed in claim 14.

18. A computer-readable storage medium that stores a
25 program for implementing the debug method as claimed in

claim 15.